AMS ANTIMATTER SEARCH RESULTS

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A search for cosmic antinuclei by the Alpha Magnetic Spectrometer (AMS) is presented. The detector was flown on board Space Shuttle Discovery in June 1998 for 10 days on a 51.7° orbit at altitudes ~ 350 km. Nuclei are identified by multiple energy loss and time-of-flight measurements and their rigidity is obtained by the bending inside the permanent magnet. 2.86×10^6 helium and 1.65×10^5 heavy nuclei have been precisely measured in a rigidity range 1 < R < 140 GV, while no antinucleus at any rigidity were detected. Integrated upper limits on the flux ratio \overline{N}/N are given which are independent on the incident spectrum.